



2021 Town of Fort Mill Manhole Infiltration and Corrosion Protection System

RFP 500-074

REQUESTOR: Town of Fort Mill
200 Tom Hall Street
Fort Mill, SC 29715

CONTACT: Phillip Aycock, Procurement Manager
803-547-2116 ext: 1169

DUE: February 11, 2021 @ 2:30pm

RETURN TO: TOWN OF FORT MILL
200 Tom Hall Street
FORT MILL, SC 29715
ATTENTION: Phillip Aycock, Procurement Manager

*****Questions relevant to this RFP may be submitted by email to Matt Kennedy, Sewer Maintenance Supervisor, no later than February 8, 2021 to Mkennedy@fortmillsc.gov

MANHOLE INFILTRATION and CORROSION PROTECTION SYSTEM

PART 1 – GENERAL

1.01SECTION INCLUDES

- A. This Section covers the infiltration and corrosion protection system for sanitary sewer manholes, where indicated on the Contract Drawings. The manhole lining system shall provide a monolithic multi-layer/component lining and cover the entire chimney, walls and benches of the manholes to provide infiltration and corrosion protection as a total system. Work includes, but is not limited to, the following:

1. Manhole cleaning of sedimentation and debris.
2. The removal of any loose and unsound material.
3. Performing surface preparation for the lining application.
4. Applying patching products.
5. Manhole Lining.

1.02SUBMITTALS

- A. Submit product data for each component specified including data substantiating that the proposed materials comply with specified requirements and recommendations by the manufacturer cover all materials.
- B. Submit technical data, and Safety Data Sheet (SDS) on each product used.
- C. Submit manufacturer's literature or specifications including surface preparation, application information, curing period, and testing.
- D. Submit copies of independent testing performed on the coating product including ASTM G210-13 and ASTM D543 indicating the product meets the requirements as specified herein.
- E. Submit technical data sheet and project specific data for repair materials to be top coated with the coating products including application, cure time and surface preparation procedures.
- F. Samples of the cured system to include the following:
1. Finish material.
 2. Stepped samples showing stages of multi-layer/component applications.

1.03 QUALIFICATION

- A. Manufacturer and Contractor specializing in the performance of work specified in this section with a minimum of three (3) years documented experience and 3,000 vertical feet of application.
- B. Submit references of at least five (5) municipal sanitary sewer projects performed within the past three years. These projects must be similar in scope and complexity to the project being bid. These references shall include the following:
 - a. Project title, locations, and contract value.
 - b. Project description.
 - c. Client contact, including customer name, address, and contact.

1.04 QUALITY ASSURANCE

- A. Coating material shall be produced in an ISO 9001 certified facility.
- B. Furnish materials of quality required by ASTM standards or other approved standards and specifications.
- C. Coating products shall be capable of being installed and curing properly within the specified environments. Coating products shall be resistant to all forms of chemical or bacteriological attack found in municipal sanitary sewer systems and capable of adhering to the substrates and repair products.
- D. Repair products shall be fully compatible with coating products including ability to bond effectively to the host substrate and coating products forming a composite system.
- E. Contractor shall utilize equipment for the application of the coating products which has been approved by the coating product manufacturer. Contractor shall have received training on the operation and maintenance of said equipment from the coating product manufacturer.
- F. Contractor shall be trained by, or have their training approved and certified by, the coating product manufacturer for the handling, mixing, application and inspection of the coating products to be used as specified herein.
- G. Contractor shall be trained in the use of testing or inspection instrumentation and knowledgeable of the proper use, preparation and installation of the coating products to be used as specified herein.
- H. Provide guarantee against defective materials and workmanship in accordance with the requirements of these specifications.

1.05 DEFINITIONS

- A. Cleaning: Removal of sand, dirt, roots, grease and all other solid or semi-solid material from the manholes as required for proper application of patching and coating products.
- B. Faults: Leaking joints, cracks, breaks or other imperfections in the manholes.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Delivery and Handling: Prevent moisture damage and contamination of materials during delivery and handling.
- B. Storage: Store materials in undamaged condition with seals and labels intact as packaged by the manufacturer.
 - 1. Store liquid products protected from freezing conditions.

1.07 SITE CONDITIONS

A. Environmental Requirements:

- 1. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the Manufacturer. Do not apply the products of this Section to frozen surfaces.
- 2. Do not apply coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the Manufacturer.
- 3. Minimum Application Temperatures for coatings: as required by Manufacturer's instructions.

B. Protection:

- 1. Public Safety: If public safety is endangered during the progress of the rehabilitation work, provide adequate protective measures to protect public pedestrian and vehicular traffic on streets and walkways.
 - a. Signs, signals and barricades used shall conform to requirements of Federal State and Local laws, rules, regulations, precautions, orders, and decrees.

2. Existing Facilities Protection: Protect manholes and sewer main piping from damage due to operations associated with work of this Section.
3. Personnel Protection: It is the responsibility of the Contractor to provide appropriate protective measures to ensure that chemicals are under the control of the Contractor at all times and are not available to unauthorized personnel or animals.

Part 2 – Materials

2.01. PROTECTIVE LINING SYSTEM MATERIALS

A. The protective lining system shall be a multi-layer/component protective lining system, including:

1. Polyurea Adhesion Coating
2. Polymer Surfacer Layer
3. Final Polyurea Armor Layer

Product shall be OBIC 1000 as manufactured by OBIC LLC.

B. Liner System Armor Layer

100% solids, no volatile organic compound (VOC), moisture tolerant, elastomeric polyurea coating to provide infiltration and corrosion protection. Material shall be capable of curing properly given the project site conditions and temperatures conforming to the following minimum physical requirements:

Property	Value
Hardness, D-2240	D 50
Tensile strength, D-412	3900 psi
100% Modulus, D-412	1500 psi
200% Modulus, D-412	1800 psi
300% Modulus, D-412	2350 psi
Tear strength, DIE-C, D-624	480 pli
Ultimate elongation, D-412	493 %
Abrasion Resistance (CS17 wheels, 1000g, 1000 cycles), D-4060	20 mg loss
ASTM G210-13 Severe Wastewater Analysis Testing	Pass

C. Liner System Surfacers Layer

100% solids, no volatile organic compound (VOC), moisture tolerant, elastomeric polyurethane coating to provide infiltration and corrosion protection. Material shall be capable of curing properly given the project site conditions and temperatures conforming to the following minimum physical requirements:

Product Type	Polyurethane	
Core Density	ASTM D 1622	6 lb/ft ³
Compressive Strength 1"	ASTM D 1621	130 - 180 psi

Part 3 - Installation

3.02 SURFACE PREPARATION

- A. Conduct surface preparation program to include monitoring of atmosphere for hydrogen sulfide, methane, low oxygen or other gases, approved flow control equipment, and surface preparation equipment.
- B. Surface preparation methods may include high pressure water cleaning, hydro blasting, abrasive blasting, grinding, detergent water cleaning and shall be suited to provide a surface compatible for installation of the liner system.
- C. Surface preparation method shall produce a cleaned, abraded and sound surface with no evidence of laitance, loose concrete, brick or mortar, contaminants or debris, and shall display a surface profile suitable for application of liner system.
- D. After the defects in the structure are identified, repair all leaks with a chemical or hydraulic sealant designed for use in field sealing of ground water. Severe cracks shall be "repaired with a urethane-based chemical" sealant. Product to be utilized shall be as approved by owner/engineer prior to installation. Repairs to exposed rebar, defective pipe penetrations or inverts, etc. shall be repaired utilizing non-shrink grout or approved alternative method.

3.03 MATERIAL INSTALLATION

- A. Application procedures shall conform to recommendations of the manufacturer, including materials handling, mixing, environmental controls during application, safety and spray equipment.
- B. Spray equipment shall be specifically designed to accurately ratio and apply the liner system.
- C. Application of multi-layer/component liner system shall be in strict accordance with manufacturer's recommendation. Final installation shall be a minimum of ½" (500 mils).

3.04 INSPECTION

- A. Final liner system shall be completely free of pinholes or voids. Liner thickness shall be the minimum value as described herein.
- B. Visual inspection shall be made by the Owner/Engineer. Any deficiencies in the finished liner system shall be marked and repaired according to the procedures set forth by Manufacturer.
- C. Halliday Testing or the equivalent should be used to inspect for defects in the liner.
- D. The sewer system may be returned to full operational service as soon as the final inspection has taken place.

4.01 10-YEAR LIMITED WARRANTY

- A. Manufacturer and Applicator warrant the liner system against failure for a period of 10 years. "Failure" will be deemed to have occurred if the protective lining fails to prevent the internal deterioration or corrosion of the structure or prevent groundwater infiltration. If any such failure occurs within 10 years of initial completion of work on a structure, the damage will be repaired at no cost to the Owner. "Failure" does not include damage resulting from mechanical or chemical abuse or act of God. Mechanical or chemical abuse means exposing the lined surfaces of the structure to any mechanical force or chemical substance not customarily present.

INSURANCE:

Company agrees that they shall keep and maintain general automobile liability insurance in the amount of \$1,000,000 per occurrence for each vehicle and \$1,000,000 in aggregate for all vehicles which Company brings onto Town property or use in any manner in the provision of services, including transportation to and from the site(s) where the services are rendered; and Company further agrees that they shall maintain general liability insurance in the amount of at least \$1,000,000 per incident/occurrence and \$1,000,000 in aggregate for all incidents/occurrence during the policy period; and Company agrees that they shall maintain Worker's Compensation Insurance on all of the Company's employees. In no event shall Company serve as self-insurer for the purpose of Workers Compensation Insurance. Company also agrees that they shall provide, in a form acceptable to Town, original certificates of Worker's Compensation Insurance, Automobile Liability Insurance and General Liability Insurance prior to commencing any work.

TOWN BUSINESS LICENSE / PERMITTING:

The successful contractor, prior to execution of the contract, must possess or obtain a Town of Fort Mill Business License. Such license must be maintained throughout the duration of the contract. The fee for such license is based on the amount of the contract with the Town if the contractor is not currently doing other business inside the town limits. If the contractor is currently doing other business within the town limits of Fort Mill, and does not possess a business license, then the fee for the license is based on the total gross receipts from customers within the city limits. Any subcontractors and sub-subcontractors must also possess or obtain a Town of Fort Mill Business License. The successful contractor, prior to execution of the contract, must also obtain any required permitting as deemed necessary by the town's building code official.

Contact the Business Office at 803-547-2034 to ask pertinent questions regarding doing business in the Town of Fort Mill.

RIGHT OF NON-COMMITMENT OR REJECTION:

This solicitation does not commit the Town of Fort Mill to award a contract, to pay any costs incurred in the preparation of the proposal, or to procure or contract for the articles of goods or services. The Town reserves the right to accept or reject any or all proposals received as a result of this request, or to cancel in part or in its entirety this proposal, if it is in the best interest of the Town to do so.

Successful bidder must comply with the insurance provisions as detailed herein.

TERMINATION:

Subject to the provisions enclosed, any contract resulting from this proposal may be terminated by the Town of Fort Mill provided a thirty (30) day advance notice in writing by the Town Manager is given to the contractor.

EXCLUDED BIDDERS:

Bids from vendors/contractors with prior poor performance; quality issues, contract conformance, payment history, timeline compliance, or any other reason the Town deems poor performance will not be considered.

Excluded Vendors/Contractors can resubmit complete company information with references for town review after a minimum of one year from the last excluded bid. Town will contact Vendor/Contractor with its decision within 30 days of company information submittal. The Town reserves the right to include or exclude said Vendor/Contractor based on findings.

RULES:

Contractor's employees are to conduct themselves in a professional manner and their appearance should always be neat and professional.

Contractors must conform to all local building rules and regulations.

INDEMNIFICATION:

Company agrees to and shall indemnify and hold the Town harmless from and against all liability, loss; damages or injury, and all costs and expenses (including attorneys' fees and costs of any suit related thereto), suffered or incurred by the Town, arising from or related to Company's negligent performance under this Agreement.

ILLEGAL IMMIGRATION REFORM ACT COMPLIANCE:

"The contractor certifies that the contractor will comply with the requirements of Chapter 14, Title 8 of the South Carolina Code of Laws titled "Unauthorized Aliens and Public Employment" and agrees to provide to the Town of Fort Mill any documentation required to establish either; (a) the applicability of such law to the contractor, subcontractor, and sub-subcontractor; or (b) the compliance with this law by the contractor and any subcontractors or sub-subcontractors."

BID REQUEST

Sealed bids will be received by the Procurement Department of the Town of Fort Mill, South Carolina until **2:30 PM** local time on **February 11, 2021** at which time they will be publicly opened and read aloud. All companies submitting bids are welcome to attend, but attendance is not mandatory. The bid opening will begin promptly at the appointed time at 200 Tom Hall Street, Fort Mill, SC 29715. *****Due to Covid Restrictions bids will be opened on the front steps of Town Hall.** No bid may be submitted after the bid opening begins. The bids must be in the Town of Fort Mill Conference room at the time of the bid opening and it is the responsibility of the bidder to ensure that the bid arrives in the correct place on time.

No bid may be withdrawn for a period of sixty (60) calendar days after the bid opening.

Bids may be mailed to The Town of Fort Mill, Attn: Phillip Aycock, P.O. BOX 159, Fort Mill, South Carolina 29716 or hand delivered to Phillip Aycock, Town of Fort Mill Procurement Officer, 200 Tom Hall Street, prior to the appointed time of the bid opening.

All bids must be in a sealed envelope and marked **"SEALED BID; 2021 TOWN OF FORT MILL MANHOLE INFILTRATION AND CORROSION PROTECTION SYSTEM RFP 500-074, OPEN 2/11/2021 @ 2:30 PM."**

Price List

Price per Linear foot \$_____

***Should the bids be higher than the amount allocated by the Town for this project, the Town reserves the right to negotiate in good faith with the low bidder. Failing an agreement, the Town may reject all bids and resubmit for new bids or make any other decisions it deems to be in its own best interest.
